

Ice in rivers and harbors.—The following reports have been received in relation to the opening of navigation and other phenomena: Albany, ice broke up, and moved down slowly, without damage 11th; first boat of season from N. Y. 30th. Alpena, bay clear of ice 31st. Bangor, ice moved out of Penobscott, and navigation opened, 29th. Chicago, lake full of ice, driven down by N. winds, 29th. Cleveland, ice broken and driven from shore 2nd; lake filled with broken ice 5th; frozen 15th; ice broke up 22nd. Dubuque, gorged 8th; frozen and lower than ever known 9th; opened 27th. Davenport, river full of floating ice 9th; frozen over 10th; floating ice 14th to 25th; clear of ice 26th; ferry-boat resumed trips 28th; navigation opened 30th. Keokuk, floating ice 8th, 9th, 12th, 14th; navigation suffering by reason of low water 17th. Warsaw, Ill., water lower than ever known at this season. Leavenworth, floating ice 8th to 12th and 18th. La Crosse, frozen 8th to 26th; ice moved 26th; went out suddenly 27th; lowest water on record 29th, 18 inches below bench-mark. Omaha, floating ice until 19th; first boat of season 31st. Pittsburgh, floating ice 10th, 19th. Philadelphia, heavy floating ice in Delaware 11th. St. Paul, ice broke up, and moved out, 30th and 31st. Toledo, ice moved out of river 1st; frozen 18th; floating ice 28th. Yankton, river frozen 9th to 11th. Port Huron, lake and river clear of ice 1st. Youngstown, N. Y., ice in river 6th, 7th, 10th, 11th, 12th, 14th to 22nd. Firesteel, Dak., ice all gone out of James river 26th. Ft. Madison, Iowa, ice running in Mississippi river 8th, 13th. Gardiner, Me., ice in Kennebec started 8th; navigation opened 31st. Florida, Mass., ice in Deerfield river broke, and moved down, 9th. Contoocookville, N. H., ice in Contoocook river breaking up 26th. Wappinger's Falls, N. Y., first boat from N. Y. city 1st. Poughkeepsie, N. Y., ice broke up 9th. Troy, N. Y., navigation opened 30th. Tioga, Penn., ice broke 2nd. Bismarck, Dak., ice in Missouri breaking up 30th; an ice-gorge formed at Sibley island, and bottom lands for many miles were overflowed, causing loss of life and property. The snow-fall in the mountains has been very heavy, and a good stage of water is expected in the Missouri.

TEMPERATURE OF WATER.

The temperature of the water is shown by the table on chart No. II. It will be noticed that the temperatures are below those for March, 1876, by from 2° to 5° at nearly all stations on the Mississippi and its tributaries, being higher only at Pittsburgh and Keokuk. Along the Middle and East Atlantic coasts the temperatures are a few degrees higher than in 1876.

ATMOSPHERIC ELECTRICITY.

Thunder-storms occurred as follows: On the 1st in Kan., La., Mo., Miss.; 2^d, Ill., N. C.; 3^d, Penn., Tenn.; 7th, N. C., Texas; 8th, Ala., N. C., Ark., Fla., Ga., Ill., Ind., La., Miss., S. C., Tenn., Tex., Ind. Ty.; 9th, Fla., Ga., N. C., S. C., Tex., Va.; 12th, Ala., La., Kan., Miss., Tex., Mo.; 13th, Fla., Ga., La., Miss., N. C., Tex.; 14th, N. C.; 16th, Ohio, Ill., Ind., La., Tenn., Tex., Ky.; 17th, Fla., La., Mo., Miss., N. C., Tenn.; 19th, Ill., Kan.; 20th, Ala., Kan., Ill., Ind., Iowa, Mich., Mo., Miss., Nebr., Ohio, Tenn., Tex.; 21st, Con., Fla., Ga., Mass., N. J., N. Y., N. C., Ohio, Penn., Tex., Va., S. C., R. I.; 22nd, Ill., Iowa, Kan., Mass., Mo., Tex.; 23rd, Ill., Iowa, Tex.; 24th, La., Miss.; 25th, Fla., Ga., Md., N. C., Va., Tenn.; 26th, N. J.; 27th, Wyo.; 28th, Ga., Iowa, N. Mex., Tex.; 29th, Cala., Iowa, Kans.; 30th, Colo., Dak., Ill., Iowa, Kans., Minn., Mo., Nebr., Wis., 31st, Ark., Dak., Ill., Ind., Ind. Ty., Iowa, Kan., Minn., Ohio, Tex., Wis.

Lightning, without thunder, was recorded as follows: 1st, Fla.; 2nd, Penn., Ga.; 5th, Fla.; 7th Kans., Ind. Ty., Tex.; 8th, Ga., Fla., Kan.; 11th, Tex.; 12th, Ind. Ty., Tex.; 13th, N. C., Tex.; 14th, Fla.; 16th, Tex., La.; 19th, Tex.; 20th, Mo., Ohio; 21st, Me., Nebr., N. C., Penn.; 22nd, Ill., Iowa, Kans.; 23rd, 27th and 28th, Tex.; 29th, Kan.; 30th, Dak., Col.; 31st, Nebr., Kan.

Auroras—Are reported as follows: 1st, Southington, Conn.; Cornish, Eastport, Bangor and Portland, Me.; Waltham, Mass.; Auburn and Contoocookville, N. H. 3rd, Waltham, Mass.; Lunenburgh, Vt. 4th, Gardiner, Me.; Pembina, Dak., and possibly Denison, Texas. 6th, Pembina, Dak. 8th, Fort Abercrombie, Dak. 9th, observed at 56 stations as follows: In Me., 4; Vt. 1; Mass., 3; Conn., 1; R. I., 1; N. Y., 3; N. J., 4; Ohio, 6; Ind., 2; Mich., 5; Ill., 3; Wis., 6; Iowa, 8; Mo., 1; Minn., 4; Neb., 1; Dak., 3. 10th, Fort Brady, Alpena and Escanaba, Mich.; Cornish and Gardiner, Me.; Auburn, N. H.; Jacksonburg, Ohio; Embarrass and Wautoma, Wis.; Bismarck, Dak. 11th, Pembina, Dak. 12th, Escanaba and Fort Brady, Mich.; Manitowoc, Wis. 14th, New York city. 18th, Litchfield, Mich. 19th, Monticello, Iowa. 23rd, Litchfield, Mich.; Lunenburgh, Vt. 30th, New York city. 31st, Malone, N. Y.

Telegraphic Ground Currents.—The observer at Pike's Peak reports ground currents on the 27th.

OPTICAL PHENOMENA.

Solar Halos.—1st, Mich., Ohio, Utah, N. C., Va. 2nd, Iowa, Me., N. H., N. Y., R. I. 3rd, Iowa, Neb., Va. 4th, Iowa, Ohio. 5th, N. Y., S. C., Fla., R. I., Conn., Ga. 6th, Iowa, Mo., Ohio, Penn., Wis., N. Y. 7th, Dak., Del., Iowa, Md., Mich., N. H., N. J., N. Y., Ohio, Wis. 8th, Iowa, Neb., N. H., Wis., Ga., N. J. 9th, Iowa, Mich. 10th, Iowa, Neb., N. Y. 11th, Iowa, Md., Ohio, Minn., Penn., Tex. 12th, Mich., Va. 13th, Mich., Neb., Wis., Fla., N. C. 14th, Conn., Me., Mich., N. H., Vt. 16th, Me., Mass.,